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Robert J. Beyers II

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SCIENTIFIC-ATLANTA, INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
5030 SUGARLOAF PARKWAY  
LAWRENCEVILLE, GA 30044

EXAMINER

LAM, WAI YIP

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/973,610		BEYERS ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Wai Lam		2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 6 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>01242002</u>  | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 – 10, 17 – 38 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application No. 2002/0004839 A1 (Wine et al.).

As to claim 1, Wine et al. teaches a method in a subscriber television system (STS) (Figure 5), the method comprising the step of providing a plurality of media content instances (multimedia streams also refer to as audio-visual content, and accompanying content) to be displayed to a subscriber (client). Wine et al. teaches a method of selecting and transmitting appropriate content to accompany a multimedia stream transmission for display by a multimedia stream client application (beginning of ¶40). Wine et al. further teaches web server 208 transmit accompanying content in the VBI tokens and the audio-visual stream as an encoded multimedia stream to the web browser (end of ¶50, ¶51). Therefore, a plurality of media content instances (multimedia stream and accompanying content) is provided to a subscriber for display from web server 208.

Wine et al. also teaches providing at least one trigger (VBI token and synchronized timing information) synchronized with a first media content (multimedia stream) instance of the plurality of media content instances (end of ¶50). Wine et al. teaches that web server 208 uses VBI tokens and synchronization timing information to synchronize the presentation of the accompanying content with the presentation of the audio-visual content (end of ¶50). Therefore, the presently claimed limitation is met.

Wine et al. also teaches enabling at least one content restriction responsive to a reception of the at least one trigger (VBI token and synchronization timing information). Wine et al. teaches that database 204 uses information extracted from the VBI is used to select content that is contextually appropriate for the content of the audio-visual stream (end of ¶42 on Page 4). Wine et al. further teaches that database 204 retrieves advertisements and links to advertisements that form the content to accompany the audio-visual stream and are further formatted into VBI tokens (¶45). Wine et al. also teaches that web sever 208 retrieves a control file from database 204 by way of data servlet 206 to generate an encoded multimedia stream by inserting VBI tokens at the appropriate locations in the audio-visual stream using the synchronized timing information in the control file to synchronize the presentation of the accompanying data with the presentation of the audio-visual stream (end of ¶50). Therefore, when web server 208 receives the VBI tokens and synchronization timing information (trigger) in the control file, the web server 208 enables a

content restriction (restriction on displaying advertisements located in VBI tokens that are contextually appropriate corresponding to the content of the audio-visual stream). This reads on the present claim limitation.

Note that Wine et al. also teaches a subscriber television system (STS) (Figure 2) and the claimed methods in the first embodiment of his invention. Wine et al. teaches the step of providing a plurality of media content instances to be displayed to a subscriber (beginning of ¶28). Wine et al. also teaches providing at least one trigger (VBI tokens and associated timestamps) synchronized with a first media content instance (multimedia stream) of the plurality of media content instances (multimedia stream and accompanying content) (the end of ¶33). Wine et al. also teaches enabling at least one content restriction (restriction on displaying thematically appropriate content) responsive to a reception of the at least one trigger (¶38, the encoded multimedia stream is generated based on thematically appropriate accompanying content from the VBI tokens).

As to claim 2, see rejection of claim 1 and note that Wine et al. also teaches wherein the at least one content restriction (restriction on displaying advertisements located in VBI tokens that are contextually appropriate corresponding to the content of the audio-visual stream) requires a second media content instance (accompanying content) of the plurality of media content instances to be displayed for a time period. Wine et al. teaches that the synchronization timing information determines when VBI tokens (advertisements and links to advertisements) are to be displayed so that related accompany

content is synchronized with the content of the audio-visual stream (¶47). Therefore, the second media content instance (accompanying content) is displayed for the time period when the second media content instance (accompany content) relates to the content of the audio-visual stream. This reads on the presently claimed limitation.

As to claim 3, see rejection of claim 2 and note that Wine et al. also teaches wherein the time period is equal to the length of display of the first media content instance (audio-visual stream) of the plurality of media content instances. As discussed in claim 2, synchronization timing information determines when VBI tokens (advertisements and links to advertisements) are to be displayed so that related accompany content is synchronized with the content of the audio-visual stream (¶47). Therefore, when the content of the audio-visual stream is displayed, the synchronization timing information triggers the display of the accompanying content in the corresponding VBI token and when new content of the audio-visual stream, the accompany content in the VBI token that corresponds to the new content is triggered and displayed. Therefore, the time of display of the first media content instance (audio-visual stream) and the second media content instance (accompanying content) is equal.

Wine et al. also teaches wherein the second media content instance (accompanying content) of the plurality of media content instances is displayed simultaneously with the first media content instance (audio-visual stream) of the plurality of media content instances. Wine et al. teaches that the encoded

multimedia stream as described in claim 1, containing advertisements in the form of VBI tokens and the audio-visual stream, is displayed together (§51).

Therefore, the presently claimed limitation is met.

As to claim 4, see rejection of claim 1 and note that Wine et al. also teaches wherein the at least one content restriction requires a second media content instance (accompanying content that is not in context with the content of the present audio-visual stream) of plurality of media content instances to be excluded from display for a time period. As discussed in claim 1, database 204 uses information extracted from the VBI is used to select content that is contextually appropriate for the content of the audio-visual stream (end of §42 on Page 4). Claim 1 also discussed inserting VBI tokens (containing accompanying content) at the appropriate locations in the audio-visual stream using the synchronized timing information in the control file to synchronize the presentation of the accompanying data with the presentation of the audio-visual stream (end of §50). Therefore, when a certain VBI token contextually relating to the current presentation of the audio-visual stream is displayed, the other VBI tokens inserted in the audio-visual stream are excluded until the context of the audio-visual stream changes. Therefore, other VBI tokens are excluded from displaying for a time period. This reads on the present claim limitation.

As to claim 5, see rejection of claim 4 and note that the time of exclusion equals to the time for displaying the current VBI token contextually relating to the current presentation of the audio-visual stream because other accompanying VBI

tokens would be displayed instead of the current VBI token when the context of the audio-visual stream changes.

As to claim 6, see rejection of claim 1 and note that Wine et al. also teaches implementing the at least one content restriction to be a hierarchy of at least one inclusive content restriction (restricting accompanying content that is contextually appropriate to the audio-visual stream) and at least one exclusive content restriction (restricting content that is non contextually appropriate to the audio-visual stream to be excluded when no thematically available content is located in the ad server). Wine et al. teaches that VBI tokens represent content that is to accompany the multimedia stream if the content is thematically appropriate or in context with the content of the multimedia stream (§31). Wine et al. also teaches that co-ad server 22 requests thematically appropriate content corresponding to each VBI token from the ad server (§34). This reads on as an inclusive restriction because accompanying content is restricted to be thematically appropriate to the multimedia stream. Wine et al. also teaches if no thematically appropriate content corresponding to a VBI token is found in the ad server, co-ad server 22 retrieves content from an outside source that is thematically appropriate (§34). This reads on an exclusive restriction because when content is retrieved from an outside source, non-thematically appropriate content is excluded. Also note that Wine et al. teaches these restrictions in a hierarchical manner.



Wine et al. also teaches enabling at least one inclusive content restriction (restricting accompanying content that is contextually appropriate to the audio-visual stream) to require the display, if available, of a second media content instance (thematically appropriate content located in the ad server) designated by the at least one inclusive content restriction. As discussed above, Wine et al. teaches that co-ad server 22 requests thematically appropriate content corresponding to each VBI token (§34) from the ad server. Wine et al. also teaches the display of the second media content instance (thematically appropriate content located in the ad server) (middle of §35). This reads on the claimed limitation.

Wine et al. also teaches enabling the at least one exclusive content restriction (restricting content that is non contextually appropriate to the audio-visual stream to be excluded when no thematically available content is located in the ad server) if the second media content (thematically appropriate content located in the ad server) instance of the plurality of media content instances is not available. As discussed above, Wine et al. teaches if no thematically appropriate content corresponding to a VBI token is found in the ad server, co-ad server 22 retrieves content from an outside source that is thematically appropriate (§34). This reads on an exclusive restriction because when content is retrieved from an outside source, non-thematically appropriate content is excluded.

Wine et al. also teaches the at least one exclusive content restriction

allowing the display of any of the plurality of media content (thematically appropriate content that is not located in the ad server) not excluded by the exclusive content restriction. As discussed above, the exclusive restriction is enabled only when no thematically appropriate content is located in the ad server (¶34). When no thematically appropriate content is located in the ad server, the co-ad server finds other thematically appropriate content (exclude other non-thematically appropriate content) from an outside source to accompany the multimedia stream (¶34). When there is no thematically appropriate content in the ad server, the encoded multimedia stream that is displayed on the browser executed by the personal computer (¶35) is displaying accompanying content that is retrieved from an outside source that is thematically appropriate for the multimedia stream. Therefore, content that is non-thematically appropriate for the multimedia stream is excluded from display.

As to claim 7, see rejection of claim 1 and note that Wine et al. also teaches wherein the at least one trigger (VBI token and synchronization timing information) includes at least one content restriction. As discussed in claim 1, only contextually appropriate content accompanies the corresponding content of the audio-visual stream. Therefore, the trigger (VBI token and synchronization timing information) includes the content restriction that restrict on displaying accompanying content located in VBI tokens that are contextually appropriate corresponding to the content of the audio-visual stream.

As to claim 8, see rejection of claim 1 and note that Wine et al. also teaches wherein the at least one trigger (VBI token and synchronization timing information) comprises information indicating the location of at least one media content instance (accompanying content) needed to satisfy the at least one content restriction. Wine et al. teaches that the accompanying content in the VBI tokens contains advertisements (§51). Therefore, the trigger (VBI token and synchronization timing information) comprises information indicating the location of the one media content (accompanying content).

As to claim 9, see rejection of claim 1 and note that Wine et al. also teaches wherein the at least one trigger (VBI tokens and synchronization timing information) comprises at least one media content instance (accompanying content) needed to satisfy the at least one content restriction (restriction on displaying accompanying content located in VBI tokens that are contextually appropriate corresponding to the content of the audio-visual stream). As discussed in claim 1, the accompanying content are contextually appropriate to the corresponding content of the audio-visual stream. Further discussed in claim 8, the accompanying content is in the VBI tokens. Therefore, the presently claimed limitation is met because triggers (VBI tokens and synchronization timing information) comprises media content instances (accompany content) that satisfy the at least one content restriction (restriction on displaying accompanying content located in VBI tokens that are contextually appropriate corresponding to the content of the audio-visual stream).

As to claim 10, Wine et al. teaches a method in a subscriber television system (STS) (Figure 5), the method comprising the step of providing a plurality of media content instances to be displayed to a subscriber (viewer) by a client device (personal computer executing web browser 210 in Figure 5). Wine et al. teaches that web browser 210 displays the audio-visual stream together with the accompanying content included in the VBI tokens (§51). Therefore, the web browser 210 provides a plurality of media content instances to be displayed to a subscriber.

Wine et al. also teaches the step of providing at least one trigger (VBI tokens and synchronization timing information) synchronized with a first media content instance (multimedia stream content, also called audio-visual stream) of the plurality of media content instances, the at least one trigger comprising at least one unique identifier (timestamp in synchronization timing information). Wine et al. teaches that web server 208 uses VBI tokens and synchronization timing information to synchronize the presentation of the accompanying content with the presentation of the audio-visual content (end of §50). Also note that the trigger (VBI tokens and synchronization timing information) comprises the synchronization timing information. Therefore, the presently claimed limitation is met.

Wine et al. also teaches enabling at least one content control module (device that encodes the multimedia stream in web server 208) in the client device (personal computer executing web browser 210), the at least one content

control module comprising a database (control file) of a plurality of values (timestamp values) for a plurality of unique identifiers (synchronization timing information), the plurality of values (timestamps) being individually matched with a corresponding content restriction (restriction on displaying only contextually appropriate content). Wine et al. teaches that web server 208 inserts VBI tokens into the audio-visual stream using synchronization timing information (§50); the VBI tokens and synchronization timing information are from a database (control file) (§48); wherein the synchronization timing information comprises timestamps that determines when VBI tokens are to be displayed (§47). Therefore, the device in web server 208 that inserts the VBI tokens into the audio-visual stream is the content control module that comprises a database (control file) with a plurality of values (timestamps). Wine et al. also teaches that VBI tokens are formed by extracted information from the VBI; the extracted information used for selecting content that is contextually appropriate for the content of the audio-visual stream; then retrieving advertisements and links to accompany the audio-visual stream (§42, 45). Therefore, VBI tokens, and their respective synchronization timestamp information are matched with a corresponding content restriction, the content restriction being a restriction on contextually appropriate content according to the audio-visual stream.

Although the methods discussed above are done at web server 208, Wine et al. teaches that the control file can be sent to the client for execution upon reception of the multimedia stream (§87), therefore, the client also has the

capability to perform the methods discussed above when the whole control file is sent to the client for execution.

Wine et al. also teaches receiving at least one trigger (VBI tokens and synchronization timing information) at the client device (personal computer executing web browser 210). Wine et al. teaches that the control file (which comprises the triggers (VBI tokens and synchronization timing information) (§48) are sent to the client (§87).

Wine et al. also teaches interpreting a value (individual timestamp of synchronization timing information) of the triggers (VBI tokens and synchronization timing information) by the content control module (device that encodes the multimedia stream, either web server 208 or client personal computer as discussed above). Wine et al. teaches that synchronization timing information is used to synchronize the presentation of the accompanying content (VBI tokens) with the content of the audio-visual stream. Therefore, the timestamp (value) must be interpreted to determine when VBI tokens are to be displayed on the web browser so that related accompanying content is synchronized with the content with the audio-visual stream (§47).

Wine et al. also teaches enabling the content control module (device that encodes the multimedia stream, either web server 208 or client personal computer as discussed above) reference the database with the value and determine at least one enabled content restriction (accompanying content is contextually appropriate with content of the audio-visual stream). Wine et al.

teaches that web server 208 uses the retrieved control file (database) with the value (timestamps of synchronization timing information) and determine a content restriction (determining where VBI tokens are to be inserted to make sure contextually appropriate content accompanies the audio-visual stream) (§50).

As to claim 17, Wine et al. teaches in a subscriber television system (STS) (Figure 5, STS 190) comprising the step of inserting, within an available insertion area in at least one transport stream (audio-visual stream), at least one trigger (VBI token and synchronization timing information) having at least one content restriction (restriction of selecting content that is contextually appropriate for the content of the audio-visual stream). Wine et al. teaches that ATVEF triggers and textual information (triggers) are located in the VBI. Wine et al. also teaches that information is extracted from the VBI to select content that is contextually appropriate for the content of the audio-visual stream (towards the end of ¶42 on page 4). Wine et al. also teaches that the ATVEF triggers are translated into VBI tokens according to the ATVEF textual information (middle of ¶43 and beginning of ¶46). Furthermore, the VBI tokens are inserted into the appropriate locations of the audio-visual stream (end of ¶50). Therefore, the triggers (VBI tokens and synchronization timing information), having content restriction (restriction of selecting content that is contextually appropriate for the content of the audio-visual stream), are inserted into the transport stream (audio-visual stream) to form an encoded multimedia stream. This reads on the presently claimed limitation.

Wine et al. also teaches the step of distributing the at least one transport stream (audio-visual stream) with the at least one trigger (VBI token and synchronization timing information) to a plurality of client devices (personal computers). Wine et al. teaches that audio-visual stream with the accompanying content included in the VBI tokens are transmitted to a web browser 210 for display (¶ 49, ¶ 50) from web server 208. Furthermore, Wine et al. teaches web server 208 communicates with multiple personal computers executing web client applications in the form of web browsers. Therefore, the presently claimed limitation is met because web server 208 in the subscriber television system (STS) 190 in Figure 5 distributes a transport stream with triggers (audio-visual stream with the accompanying content included in the VBI tokens) to a plurality of client devices (personal computers).

As to claim 18, see rejection of claim 17 and note that Wine et al. also teaches wherein the at least one content restriction (restriction on contextually appropriate content) is an inclusive content restriction requiring the insertion of at least one designated media content instance (advertisement), and wherein the designated media content instance is inserted into the available insertion area in the at least one transport stream (audio-visual stream). Wine et al. teaches that the VBI tokens inserted into the audio-visual stream as discussed in claim 17, include advertisements downloaded from the co-ad server. Therefore, by inserting VBI tokens (triggers) that enable content restriction (restriction of selecting content that is contextually appropriate for the content of the audio-



visual stream), designated media content (commercial advertisements) are also inserted into the audio-visual stream.

As to claim 19, see rejection of claim 18 and note that Wine et al. also teaches wherein the at least one designated media content (advertisement) instance is a local commercial. Wine et al. teaches that the appropriateness of the advertisements provided to the web browser is based on its location (middle of ¶46). Therefore, the commercial (advertisement) is a local commercial.

As to claim 20, see rejection of claim 17 and note that Wine et al. also teaches wherein the at least one content restriction (restriction on contextually appropriate content) is an exclusive content restriction requiring the exclusion of at least one designated media content instance (advertisement that is not contextually appropriate). As discussed in claim 17, only contextually appropriate advertisement is included in the VBI token (trigger) that is inserted into the audio-visual stream (transport stream). Therefore, non-contextually appropriate advertisements (designated media content) are excluded from being displayed on the client device (personal computer) because the non-contextually appropriate advertisements are not inserted into the audio-visual stream (transport stream).

As to claim 21, a method in a subscriber television system (STS) (System 190 in Figure 5), the method comprising the step of providing a plurality of media content instances (audio-visual streams and thematically appropriate content) to be displayed to a subscriber (viewer), a first media content instance of the

plurality of media content instances (audio-visual stream) being a video stream and a second media content instance (thematically appropriate content) of the plurality of media content instances being an advertisement. Wine et al. teaches that an encoded multimedia stream comprises VBI tokens that are inserted into audio-visual stream (video stream), where the VBI tokens include advertisements (§§49,50). Wine et al. further teaches that the advertisements in the VBI tokens are determined by the contextually appropriateness relating to the audio-visual stream (§§42). Wine et al. also teaches the encoded multimedia stream is displayed to a subscriber (§§50). Therefore, the present claim limitation is met.

Wine et al. also teaches the step of providing at least one trigger (VBI token and synchronization timing information) synchronized with a priority event (content being displayed) in the video stream. Wine et al. teaches that the synchronized timing information determines when VBI tokens are to be displayed on the web browsers so that the related accompanying content is synchronized with the content of the audio-visual stream. This reads on the present claim limitation.

Wine et al. also teaches the step of enabling the advertisement to be displayed simultaneously with the priority event in the video stream (§§51).

As to claim 22, see rejection of claim 21 and note that Wine et al. also teaches wherein the advertisement is selectable by the subscriber. Wine et al. teaches that the advertisements can be provided according to user preferences (§§55). This reads on the present claim limitation.

As to claim 23, see rejection of claim 21 and note that Wine et al. also teaches wherein the advertisement is an image of a scene item, and wherein the priority event is a scene displayed in the video stream where the scene item is represented. Wine et al. teaches that contextually appropriate content (advertisement) accompanying the audio-visual stream are dynamically changed so that the displayed accompanying content is contextually appropriate for the content of the audio-visual stream transmission (§25, 50). Therefore, the content of the audio-visual stream is accompanied by an advertisement and when the content of the audio-visual stream changes, the synchronized timing information is triggered and thus the presentation of the accompanying content (advertisement) is synchronized with the presentation of the audio-visual stream (end of §50).

As to claim 24, Wine et al. teaches a system in a subscriber television system (STS) (Figure 5). Wine et al. does not explicitly teach the STS comprises memory for storing logic and a processor for executing the logic in the memory. However, as discussed in claim 1, web server 208 inserts VBI tokens into the audio-visual stream using a retrieved control file to form an encoded multimedia stream so that it can transmit the stream to a web browser (§50, §51). Therefore, web server 208 must contain a processor that processes the control file stored in some form of memory to generate the encoded multimedia stream.

Furthermore, Wine et al. teaches methods for the rest of the claim limitations corresponding to claim 1 to be processed by web server 208.

Therefore, web server 208 must also contain logic for the executing the methods of claim 1.

As to claim 25, see rejections of claims 2 and 24.

As to claim 26, see rejections of claims 3 and 25.

As to claim 27, see rejections of claims 4 and 24.

As to claim 28, see rejections of claims 5 and 27.

As to claim 29, see rejection of claims 7 and 24.

As to claim 30, see rejection of claims 9 and 24.

As to claim 31, Wine et al. teaches a system in a subscriber television system (STS) client device (personal computer executing web client applications 210 in Figure 5, as discussed in ¶40), the system comprising a memory for storing logic in the STS client device and a processor for executing the logic stored in the memory in the STS client device. Wine et al. teaches that VBI tokens and synchronization timing information are exported into a control file and the control file contains data needed by servlets and applets to control the browsers 210 executed by personal computers (¶48). Therefore, the control file contains logic for the controlling browser 210. Further, Wine et al. also teaches that the control file is sent to the client for execution upon receipt of the multimedia stream (¶87). Therefore, the personal computer executing the client application (STS client device) contains a processor that executes the logic of the control file, where the control file must be stored in some form of memory when the client receives the control file. This reads on the presently claimed limitation.

Wine et al. also teaches that the personal computer executing the client application (STS client device) comprises logic configured to provide a plurality of media content instances to be displayed to a subscriber. Wine et al. teaches that the web browser displays the audio-visual stream together with the accompanying content to the viewer. Therefore, the presently claimed limitation is met.

Wine et al. also teaches the web server 208 comprises logic configured to provide at least one trigger (VBI tokens and synchronized timing information) synchronized with a first media content instance (multimedia stream) of the plurality of media content instances and logic configured to enable at least one content restriction responsive to a reception of the at least one trigger as discussed in claim 1. However, Wine et al. also teaches that the control file (logic) can be sent to the client for execution upon reception of the multimedia stream. Therefore, the client can process the logic that the web server 208 can perform as discussed in claim 1.

As to claim 32, see rejections of claims 2 and 30.

As to claim 33, see rejections of claims 3 and 30.

As to claim 34, see rejection of claim 24 for the corresponding limitations and note that web server 208 in Figure 5 is the claimed headend device because web server 208 serves multimedia content to personal computer executing a web application 210 (¶50, ¶51).

As to claim 35, see rejections of claims 2 and 34.

As to claim 36, see rejections of claims 3 and 34.

As to claim 37, Wine et al. teaches a system in a subscriber television (STS) headend (web server 208 in Figure 5). Wine et al. also teaches the system comprising a memory for storing logic in the STS headend and a processor for executing the logic stored in memory in the STS headend as discussed in claim 34.

Wine et al. also teaches logic configured to allow the STS headend to receive and distribute at least one transport stream (multimedia stream, also called audio-visual stream) to a plurality of client device, the STS headend comprising an administrative content control module. Wine et al. teaches that the web server 208 (STS headend) is configured to receive audio-visual stream (transport stream) from data servlet 206 in the database computer 204 in Figure 5 (middle of ¶50). Also the web server 208 communicates with personal computers executing web applications 210 (¶40), and transmits and encoded multimedia stream (transport stream) to web browsers 210. Wine et al. further teaches the STS headend comprises an administrative content control module that inserts VBI tokens at appropriate locations in the audio-visual stream using synchronization timing information in order to synchronize the presentation of the accompanying content with the presentation of the audio-visual stream) retrieved from the database computer 204 via data servlet 206 (towards the end of ¶50). Therefore, the presently claimed limitations are met.

Wine et al. also teaches web server 208 comprises logic configured to enable at least one trigger (VBI token and synchronization timing information) to be synchronized with an available insertion area in the transport stream as discussed above. Since the VBI tokens are inserted at appropriate locations of the audio-visual stream for synchronization purposes using the synchronization timing information (§50), the administrative content control module (unit that encodes VBI tokens into audio-visual stream) comprises the logic that enable VBI tokens (triggers) to be synchronized with the insertion area of the audio-visual stream. Also, database computer 204 uses extracted information (ATVEF triggers and textual information) to select content that is contextually appropriate for the content of the audio-visual stream (§42 on page 4). Database computer 204 further retrieves advertisements and links according to the textual information (§46). In turn, database computer 204 formats the advertisements and links into VBI tokens (§46). Therefore, the VBI tokens (triggers) comprise content restrictions (restriction on including only contextually appropriate advertisements and links).

As to claim 38, see rejection of claim 37 and note that Wine et al. also teaches wherein the at least one content restriction (restriction on including only contextually appropriate advertisements and links) is an inclusive content restriction requiring the insertion of at least one designated media content, and wherein the administrative content control module allows the insertion of the least one designated media content into the available insertion area in the transport

stream. The step of inserting one designated media content (VBI tokens that contain advertisements) and the step of the administrative content control module controlling the insertion into the transport stream are already discussed in claim 37.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application No. 2002/0004839 A1 (Wine et al.) in view of U.S. Patent Application No. 2002/0010928 A1 (Sahota).

As to claim 11, see rejection of claim 10 and note that Wine et al. teaches wherein the client device displays a screen display comprising an application interface (Unit 32 in Figure 4), an advertisement banner (Unit 36 in Figure 4), and a video stream (Unit 42 in Figure 4), the video stream displaying a first media content instance (multimedia stream) of the plurality of media content instances (§ 36).

Wine et al. fails to teach wherein the first media content instance of the plurality of media content instances being a commercial.



However, Sahota teaches wherein a TV can receive and display Internet advertisement content integrated with TV commercial (§ 36). This reads on a first media content instance of the plurality of media content instances being a commercial.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the first media content (multimedia of Wine et al., using the commercial as the first media content of Sahota, for the purpose of integrating Internet advertising banners with television commercials without modifying the commercials or advertising banner (§ 16), thereby saving production time of the broadcasters (§ 5).

As to claim 12, see rejection of claim 11, and note that Wine et al. teaches that the enabled content restriction (display accompanying content that is related to the audio-visual stream) is an inclusive restriction, the inclusive restriction requiring the display of a second media content (contextually appropriate content relating to the first media content) instances in the advertisement banner (advertising frame 36 in Figure 4). Wine et al. teaches that when the multimedia stream relates to news on Toronto Maple Leafs, accompanying content corresponding to the Toronto Maple Leafs is displayed in the advertising frame (§ 38). Therefore, the claim limitation is met.

As to claim 13, see rejection of claim 12 and note Wine et al. also teaches wherein the second media content instance (contextually appropriate content relating to the first media content) of the plurality of media content instances is

associated with a funding entity of the commercial. As discussed in claim 12, Wine et al. teaches that when the multimedia stream (first media content) relates to news on Toronto Maple Leafs, accompanying content (second media content) corresponding to the Toronto Maple Leafs is displayed in the advertising frame (¶38). Therefore, the second media content (content relating to the Toronto Maple Leafs) is associated with the funding entity of the first media content (multimedia stream), where the first media content is a commercial as discussed in claim 11 because the accompanying content relates to the Toronto Maple Leafs.

As to claim 14, see rejection of claim 11 and note that Wine et al. also teaches wherein the enabled content restriction (display only accompanying content that is related to the audio-visual stream) is an exclusive content restriction, the exclusive content restriction allowing the display of any of the plurality of media content instances in the advertisement banner not excluded by the exclusive content restriction. Wine et al. teaches that accompanying content is dynamically changed so that it corresponds to the content of the multimedia stream. Further, the accompanying content corresponding to the multimedia stream is displayed in advertising frame 36 (¶38). Therefore, exclusive content restriction (display only accompanying content that is related to the audio-visual stream) is satisfied because accompanying content not corresponding to the content in the multimedia stream is not displayed.

As to claim 15, see rejection of claim 14 and note that Wine et al. also teaches wherein at least one of the plurality of media content instances excluded by the exclusive content restriction (display only accompanying content that is related to the audio-visual stream) is media content (accompanying content that does not correspond to the multimedia stream) associated with a competitor of a funding entity of the commercial. As discussed in claim 13, Wine et al. teaches that when the multimedia stream (first media content) relates to news on Toronto Maple Leafs, accompanying content (second media content) corresponding to the Toronto Maple Leafs is displayed in the advertising frame (§38). Further, when the multimedia stream changes to display Olympic news, new accompanying content (accompanying content that was excluded during the display of the news on Toronto Maple Leafs) corresponding to news on the Olympics is displayed (§38). Therefore, the media content excluded (content corresponding to news on the Olympics) is media content associated with a competitor of a funding entity of the news on Olympics. The news on Olympics and the news on Toronto Maple Leafs are competitors because their corresponding accompanying content are different advertisements and their respective commercial are advertising thematically different material.

As to claim 16, see rejection of claim 11 and note that Wine et al. wherein the enabled content restriction is an inclusive/exclusive combination content restriction (Displaying accompanying content related to the multimedia stream and excluding accompanying content not related to the multimedia stream),

wherein the inclusive/exclusive combination content restriction requires the display of a second media content instance (thematically appropriate accompanying content) of the plurality of media content instances in the advertisement banner if available. Wine et al. teaches that a selector to select thematically appropriate content to accompany a multimedia stream (first media content, also see discussion in claim 10 for reasons and motivation for multimedia stream being a commercial), where the accompanying content dynamically changes so that the displayed accompanying content is thematically appropriate for the content of the multimedia (§11). Wine et al. further teaches that the accompanying content is displayed on the advertisement frame 36 (§38).

Wine et al. also teaches the second media content (thematically appropriate accompanying content) of the plurality of media content instances being associated with a funding entity of the commercial as discussed in claim 13.

Wine et al. also teaches if the second of the media content (thematically appropriate accompanying content) is not available, then the inclusive/exclusive combination restriction requires the display of a third of the plurality of media content (thematically appropriate content from an outside source) instances in the advertisement banner, the third of the plurality of media content instances being any media content not associated with a competitor of a funding entity of the commercial (another commercial and its funding entity that does not thematically correspond to the current commercial as discussed in claim 15).

Wine et al. teaches that if no thematically appropriate content corresponding to a VBI token is found in the ad server database, content from an outside source that is thematically appropriate content is used (§34). Since the third media content is also thematically appropriate for the current multimedia stream (commercial), the third media content is not associated with another commercial and its funding entity because the current accompanying content does not correspond to the another commercial thematically.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai Lam whose telephone number is (571) 272-2827. The examiner can normally be reached on Monday - Friday 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JOHN MILLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600